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Creating a Set of Conservation Guidelines for Exhibitions

Exhibit conservation focuses on practical techniques that protect museum collections from unnecessary damage while on display. The Harpers Ferry Center–Conservation has recently completed a technical resource to assist exhibit specialists achieve preservation-responsible exhibits. The resource is called the *Exhibit Conservation Guidelines* and has been produced as an electronic publication, presented in a CD-ROM format. Excerpts are included below.

Improperly designed and poorly fabricated exhibits are a significant source of damage for the collections of the National Park Service. Several years ago the NPS Harpers Ferry Center's Division of Conservation embarked on a major preventive conservation project to develop a set of practical, exhibit guidelines. The objective was to create a "user friendly" technical resource for both NPS personnel and exhibit specialists in general.

The *Exhibit Conservation Guidelines* establishes a methodical approach for the inclusion of conservation in the often-confusing processes of exhibit development and production. It defines the critical areas of involvement for conservation specialists, includes the baseline information known in the field, and adds what we at Harpers Ferry Center have learned from many years of producing exhibits.

Only by involving conservation early and throughout the process can we ensure preservation-responsible planning, design, and production. Years of experience have taught us that successful exhibits require a close, constructive working relationship between exhibit, curatorial and conservation specialists. A sense of shared responsibility for collection preservation and trust are invaluable parts of the equation.

The technical resource includes 250 pages of guidelines, technical notes, and illustrations; the following summarizes the key guidelines.

A. Exhibit Planning

Integrating Conservation into the Exhibit Process

- Integrate conservation early in the exhibit planning phase.
- Provide adequate time and resources.
- Search for balanced conservation solutions.

The Exhibit Team

- Work cooperatively with the team.
- Utilize supportive design staff who have conservation experience.
- Require detailed plans that specify performance criteria.

The Role of the Exhibit Conservator

- Include an exhibit conservator on the exhibit team.
- Involve the exhibit conservator in the earliest stages of the process.

Selecting Objects

- Select appropriate display objects. Avoid selecting too many objects.
- Take into consideration the aesthetics and treatment requirements of each object.
- Avoid permanent exhibit of objects.
- Allow enough time and resources to safely prepare, mount, install, or replicate exhibit objects.

Establishing Conservation Criteria

- Determine the conservation needs of each individual object chosen for display.
- Establish necessary but realistic conservation criteria for display.
- Incorporate the conservation criteria into exhibit design.

Collections Management

- Ensure safe handling of objects in all phases of exhibit development.
- Stabilize all objects according to need.
- Include the appropriate documentation for each object.
- Protect objects during photography.

B. General Planning

Multilevel Conservation Response

- Design for environmental stability and protection.

Consider both macro and micro approaches.
Choose an appropriate level of response from the multiple options.

Exhibit Format and Layout
Use enclosed display when possible.
Allow sufficient room for traffic flow.
Group together objects that have similar conservation criteria.

Temperature and Relative Humidity
Obtain baseline information about the temperature and relative humidity.
Control the environment within the entire exhibit space.
Locate sensitive objects in the most stable locations.
Provide additional control for sensitive objects.

Particulate Contamination
Monitor pollutants and enclose sensitive collections.
Use high-efficiency filters in environmental systems.
Use localized filtration equipment as needed.

Chemical Pollutants
Monitor pollutants and enclose sensitive collections.
Incorporate chemical filters in the environmental systems.
Provide air circulation.
Select stable construction materials.
Aerate the exhibition space before object installation.

Exhibit Lighting
Develop a lighting plan that responds to conservation criteria.
Limit total light exposure.
Filter all sources of ultraviolet radiation.
Control infrared radiation.
Exclude sunlight.
Construct lighting mockups.

Biological Infestation
Examine objects for signs of infestation and active mold.
Design exhibits to inhibit infestations.
Enclose objects when the risk of infestation is high.
Avoid introducing insects through props and unchecked exhibit materials.
Control human behaviors that encourage infestation.

Physical Security
Conduct a risk assessment.
Provide the appropriate level of protection.
Use tamper resistant hardware.
Facilitate authorized curatorial access to the objects.

Emergency Preparedness and Fire Protection
Develop fire protection and emergency response plans.
Perform a risk assessment and address potential problems.

C. Exhibit Case Design

Designing a Conservation-Grade Case
Design cases as protective enclosures.
Establish performance criteria.
Provide detailed, explicit drawings and specifications.
Build and test complicated case designs as prototypes when possible.
Test the fully assembled case in its final location.

Case Stability, Security, and Access
Construct a physically stable, structurally secure case.
Provide appropriate security features.
Ensure practical access design for curatorial entry.

Sealed Exhibit Cases
Use sealed display cases when appropriate.
Design well-sealed cases with tight joints and with gaskets.
Use conservation-appropriate sealants.
Test case performance.

Ventilated Exhibit Cases
Use ventilated cases for appropriate applications.
Control the design and construction of ventilated cases.
Use positive-pressure cases when appropriate.

Lighting Design within Cases
Develop a case lighting plan and specify appropriate lighting equipment.
Isolate lights from the display chamber.
Reduce heat gain and temperature cycling.
Incorporate heat-reflecting and insulating materials when necessary.

Humidity-Control Principles
Provide a well-sealed case that will support humidity control.
Ensure adequate air circulation within the case.
Provide separate access to the environmental maintenance chamber.
Test the case before enclosing objects.
Monitor the interior relative humidity for the duration of the exhibit.

Active and Passive Humidity-Control
Establish whether the goal is stabilization or control.
Select an appropriate passive or mechanical system.

Provide safeguards for mechanical systems.
Include appropriate and sufficient moisture-absorber medium for passive control.
Test and monitor the case.

Pollution-Control Systems

Incorporate enough absorber to remove pollutants for six months to one year.
Ensure unrestricted airflow.
Provide access to change the absorber.
Maintain the absorber.

D. Installation and Maintenance

Choosing Conservation-Appropriate Materials

Select conservation-safe materials for case construction.
Avoid adhesives within the object display area.
Review the composition of commercial interior finishes.
Allow sufficient curing time before installing objects.
Isolate objects from painted or varnished surfaces.
Select and attach decorative fabrics carefully.

Using Less Stable Materials

Use the least hazardous material available, and isolate objects from them.
Aerate the case after applying coatings and sealants.
Isolate objects from problematic surfaces.
Incorporate a pollutant absorber or scavenger.

Design and Fabrication of Exhibit Mounts

Design and fabricate mounts for object installation ahead of time.
Protect the integrity of the object.
Support the entire object to avoid physical stress.
Provide adequate support for flexible objects.
Support all parts independently over as large an area as possible.
Stabilize objects from vibration.
Ensure the security of framed works.

Exhibit Production and Object Installation

Avoid transporting objects into production areas.
Inspect exhibit assemblages that affect objects during the production phase.
Complete construction before object installation.
Evaluate the exhibit teams performance.

Exhibit Maintenance

Provide a maintenance manual which includes the conservation criteria.
Monitor exhibit conditions.
Perform necessary maintenance to ensure the continued performance.
Keep the exhibit area clean.
Plan ahead for the safe movement of objects.

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